**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

CELLULAR COMMUNICATIONS EQUIPMENT LLC,
 	
          Plaintiff,
 	
v.
 	
SAMSUNG ELECTRONICS CO., LTD., ET AL.,
 	
          Defendants.
	Civil Action No. 6:14-cv-759-JRG

**PLAINTIFF'S REPLY BRIEF
ON CLAIM CONSTRUCTION**

CCE submits this reply brief addressing claim construction and alleged indefiniteness issues concerning the '820 Patent, '786 Patent, '872 Patent and U.S. Pat. No. 7,218,923 (the "'8923 Patent").

A.   U.S. Patent No. 8,055,820

1.   "monitor[ing] a usage of a plurality of buffers" (cl. 1, 12, 24)

CCE's Proposed Construction	Defendants' Proposed Construction
No construction necessary.	"monitoring an act, way, or manner of using a plurality of buffers"

Defendants seek to revive the argument this Court rejected last April. The asserted claims recite "monitoring a usage of a plurality of buffers." "Usage" is an ordinary word used in its ordinary sense and, as the Court recognized and numerous dictionaries confirm, Defendants' proposal constricts that ordinary meaning by excluding the "fact of being used," despite the fact that particular meaning is supported by the specification.   *See* Dkt 413 at 6-7. There is no lexicography or disclaimer to justify their proposal, and it must fail.

Defendants' repeatedly emphasize an alleged distinction between "monitoring buffers" and "monitoring a usage of a plurality of buffers." But they fail to articulate what that distinction is — they never identify the "territory" that allegedly lies between monitoring "usage" of buffers and "monitoring buffers" (*i.e.*, what they are attempting to exclude). Instead, they advance a construction of "usage" that confines its ordinary meaning without explaining the impact of their proposal. But if there is any unclaimed territory between monitoring "usage" of buffers and "monitoring buffers," it lies beyond the ordinary meaning of "usage," not a narrowed construction of it.

Indeed, there is no intrinsic support for Defendants' position. They extrapolate from single sentence in the specification explaining that "monitoring 310 buffers may include

monitoring a usage of one or more communications buffers." Ex. A ('820 Patent)[1] at 7:58-60.

But as noted previously, that passage explains that the step "monitoring 310 buffers," shown in

the <u>flowchart</u> of Figure 3, may include monitoring "usage" of buffers. Nothing in this passage

circumscribes the broad meaning of "usage;" it simply says that a particular box on a chart may

encompass monitoring "usage." The patent says nothing to indicate or highlight any substantive

distinction between "monitoring buffers" and monitoring "usage" of buffers, and it is improper

to adopt a special meaning of "usage" in a quest to find one.

2.   "network device" (cl. 1, 12, 24)

CCE's Proposed Construction	Defendants' Proposed Construction
No construction necessary. Not subject to 35 U.S.C. § 112(6). Alternatively, "base station."	Indefinite. This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: "receiving the communicated buffer status report" Structure: no corresponding structure disclosed

Claims 1, 12, and 24 are directed to a method, apparatus, and computer-readable medium

for communicating a buffer status report to a "network device." They do not invoke § 112(6).

Indeed, the claims do not even recite a function for the "network device" to perform —

Defendants' proposed function is found nowhere in the claims, and is completely baseless.

Tecsec, Inc. v. Int'l Business Machines Corp., 731 F.3d 1336, 1348 (Fed. Cir. 2013) ("The term

'digital logic means is also not subject to § 112, ¶ 6. As an initial matter, the claims do not recite

a function for the digital logic to perform.").

Further, in the context of the '820 Patent, "network device" designates structure to skilled

artisans — namely, a base station. *Id.* This is clear in the specification, which explains that the

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[1] Exhibits A-D were filed with CCE's Opening Brief on Claim Construction (Dkt 131).

short buffer status reporting format includes a radio bearer group identity that "enables a network device, such as **a base station**, to know the buffer status[.]" Ex. A ('820 Patent) at 8:44-46. It is well known that the purpose of buffer status reporting is to send a report to a base station. Base stations are the network devices that communicate directly with user devices in cellular networks. Ex. E at 62. 3GPP Technical Specifications at the time of the invention confirm that buffer status reports are sent from user equipment to base stations (referred to as "eNodeBs" or "eNBs" in LTE networks) to support packet scheduling. *See* Ex. F at 51-53, 57, 64.

Accordingly, the term "network device" lacks all the "hallmarks of a means-plus-function limitation." *See Lodsys, LLC v. Brother Int'l Corp.*, 2013 U.S. Dist. LEXIS 85614 at *117-118 (E.D. Tex. Jun. 14, 2013). The limitation is not expressed in terms using the words "means" or "step" for performing a function, no specified function follows the recited element, and the term would be understood as structure to a person skilled in the art. *Id.* Defendants' indefiniteness allegation is a strained attempt to invalidate claims that have been twice construed by this Court and successfully survived two *inter partes* review challenges. It should be rejected.

B.   U.S. Patent No. 8,645,786

1.   "self-decodable" (cl. 1, 12)

CCE's Proposed Construction	Defendants' Proposed Construction
No construction necessary.	"decodable only by itself without considering other data"

The plain meaning of "self-decodable" is evident and supported by the specification; it denotes that something can be decodable by itself. *See* Ex. C ('786 Patent) at 8:39-50.   This concept is expressed by the term "self-decodable," without construction.

Defendants' attempt to append the phrase "without considering other data" to the construction of "self-decodable" is unsupported and vastly overreaching. The intrinsic evidence

cited, rather than forbidding consideration of any "other data," indicates that a specific packet in the form of a "self decodable" redundancy version can be decoded without resort to another *redundancy version* (provided it is correctly transmitted and received).   *Id.* at 8:39-50. Defendants' proposal seemingly excludes "considering" *any* other data — even control information indicating, for instance, the code rate being used, which is necessary for the decoder — in the "decoding" process. This goes far beyond the specification.

Further, Defendants' broad negative limitation is inconsistent with the intrinsic evidence, which explains that self-decodability is not an absolute quality of transmitted information to be considered in a vacuum, but a characteristic describing how information is represented prior to transmission. *Id.* at 8:45-47 ("Such a redundancy version is *typically* self decodable, that means, that it *can* be decoded by itself, *unless of course* the reception is too noisy.") (emphasis added). Defendants' proposal recasts "self-decodability" as an absolute quality, ignoring the clear teaching of the specification.

2.   "self-decodable redundancy version" (cl. 1, 12)

CCE's Proposed Construction	Defendants' Proposed Construction
"redundancy version": "one of multiple possible encoded representations of a bit sequence suited for transmission and/or retransmission" "self-decodable": no construction necessary	"one of multiple possible encoded representations of a bit sequence decodable only by itself without considering other data and suited for transmission/retransmission to ensure correct receipt"

Defendants' attempt to dictate that a "self-decodable redundancy version" must "ensure correct receipt" is unfounded.   Claim 1, in contemplating retransmissions even following transmission of a first packet represented by a "self-decodable redundancy version," itself demonstrates that particular redundancy versions cannot and do not "ensure" correct receipt, and Defendants identify nothing in the written description to lend credence to their proposal. Moreover, their use of "the infinitive" form of the verb "ensure" is no remedy; Defendants'

proposal introduces an element of purpose that does not belong in the claim. Whether "one of multiple possible encoded representations of a bit sequence suited for transmission and/or retransmission" (a "redundancy version") is "self-decodable" should not turn on whether an unspecified entity intends it "to ensure" correct receipt.

3. "self decodable rate matching pattern" (cl. 1)

CCE's Proposed Construction	Defendants' Proposed Construction
"rate matching pattern": "patterns for puncturing and/or repeating bits" "self-decodable": no construction necessary	Indefinite.

The '786 Patent explains the meaning of "self-decodable rate matching pattern." To begin with, it is undisputed that a "rate matching pattern" is a "pattern for puncturing (deleting) or repeating bits." Ex. C at 9:35-38; Def. Resp. at 22. It is also agreed that, in the '786 Patent, parameter *s* specifies whether a redundancy version is to be self-decodable. Ex. C. at 8:39-40; Def. Resp. at 23.

Against this settled backdrop, the '786 Patent states that "the parameters of the *rate matching stage* depend on the value of the RV parameters *s and r*." Ex. C at 7:61-62 (emphasis added). Specifically, parameter *s* determines how the puncturing is implemented (by identifying which bits must be prioritized) and thus directly impacts — no less than parameter *r* — the *rate matching pattern*:

> If s=1, then when puncturing during rate matching the so called systematic bits are prioritized over the parity bits of the turbo code. Such a redundancy version is typically self decodable, that means, that it can be decoded by itself, unless of course the reception is too noisy. This is not the case when s=0 (parity bits are prioritized), where it can happen that a RV cannot be decoded by itself, even in the absence of noise, but only together with another RV. Therefore the first transmission of a packet should always be self-decodable, i.e. employ s=1.

Id. at 8:39-52 (emphasis added). This passage debunks Defendants' claim that a "self decodable rate matching pattern" conflicts with the specification as well as their assertion that parameter *r* exclusively dictates the applied "rate matching pattern."[2]

Accordingly, Defendants' assertion that self-decodability does not depend on the rate matching pattern is incorrect. The '786 Patent makes clear that both parameters *r* and *s* define the rate matching pattern. Ex. G (Royer Decl.) at ¶¶ 41-42. That is, for all other factors being equal, a change in the value of parameter *s* will result in different rate matching pattern, even if parameter *r* is unchanged, by the virtue of different systematic bits and parity bits being punctured depending on the value of parameter *s*. *Id*.

Moreover, the patent confirms that varying parameter *s* for a given parameter *r* results in different rate matching patterns, some of which yield a self-decodable data packet and others which do not. *Id.* at ¶ 42 (citing Ex. C at 8:39-52). The self-decodable property of a data packet therefore results directly from the rate matching pattern that produced the packet. *Id*. The phrase "self-decodable rate-matching patterns" would therefore make "perfect sense" to one skilled in the art. *Id*. A self-decodable rate matching pattern will produce self-decodable information by prioritizing systematic bits rather than parity bits during rate matching. *Id*.

Defendants attempt to characterize the claim language as "nonsensical" is not credible. Neither logic nor common sense support their hypothesis that, because the term "rate matching pattern" follows the term "self-decodable," it must be referring to a "rate matching pattern" that is "itself" "self decodable." On its face, such reasoning transforms ordinary phrases (e.g., "healthy recipe," "high school," "short temper," or "tall tale") into confusing thought

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[2] Contrary to Defendants' insinuations, the intrinsic record <u>never</u> states that parameter *r* alone determines the rate matching pattern. During prosecution, the applicants simply explained that the rate matching pattern is "based on" (not "exclusively determined by") rate matching parameter *r*, and as noted above, the specification explains how *both* parameters *s* and *r* impact a rate matching pattern.

experiments. Just as a "healthy recipe" does not refer to a recipe that is, *itself*, healthy, but a recipe used to *produce* something healthy, a "self-decodable rate matching pattern" refers to a rate matching pattern used to *produce* self-decodable information (by prioritizing systematic bits during rate matching).

Finally, Defendants' effort to portray CCE's modified proposal as evidence of indefiniteness is baseless. CCE's revision simply reflects an effort to hone its proposal to address the issues raised as simply and accurately as possible. They are not inconsistent.

Defendants thus fail to meet their burden to establish invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd.*, 131 S. Ct. 2238, 2243 (2011). The claims of a patent are not indefinite so long as they inform those skilled in the art about the scope of the invention with "reasonable certainty," viewed in light of the specification and prosecution history and having regard to the relevant subject-matter. *Nautilus, Inc. v. Biosig Instruments, Inc*., 134 S. Ct. 2120, 2129 (2014). Because one skilled in the art would understand the claim language and scope of the invention with at least reasonable certainty, Defendants' arguments fail. Ex. G at ¶¶ 41-44.

C.   U.S. Patent No. 8,254,872

1.   Means-Plus-Function Terms (cl. 12)

	CCE's Proposed Construction	Defendants' Proposed Construction
"receiving means for receiving a network identifier of a visited network notified to the terminal when the terminal is registered in the visited network"	Function: receiving a network identifier of a visited network notified to the terminal when the terminal is registered in the visited network Structure: a mobile terminal (and equivalents). See 1:18-26, 2:12-56, 3:19-42, Fig. 1. Alternatively, should the Court determine an algorithm is required, the structure is: a mobile terminal (1:24, 2:15, 2:21, 2:42, 3:19, Fig. 1) configured to perform one or	Indefinite. This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: "receiving a network identifier of a visited network notified to a terminal when the terminal is registered in the visited network"

	more of the algorithms set forth in the '872 Patent at 2:14-33, 2:40-44, 3:19-29, and Fig. 1 (and equivalents).	Structure: no corresponding structure disclosed
"comparison means for comparing the received network identifier of the visited network with a network identifier of a home network of the terminal"	Function: comparing the received network identifier of the visited network with a network identifier of a home network of the terminal Structure: a mobile terminal (and equivalents). See 2:21-39, 2:40-56, 3:30-42, Fig. 1. Alternatively, should the Court determine an algorithm is required, the structure is: a mobile terminal (1:24, 2:15, 2:21, 2:42, 3:19, Fig. 1) configured to perform one or more of the algorithms set forth in the '872 Patent at 2:15-33, 2:40-49, 3:30-38, and Fig. 1 (and equivalents).	Indefinite. This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: "comparing the received network identifier of the visited network with a network identifier of a home network of the terminal" Structure: no corresponding structure disclosed
"connection means for setting up an emergency call connection"	Function: setting up the emergency call connection Structure: a mobile terminal (and equivalents). See 1:18-26, 2:12-56, 3:19-42, Fig. 1. Alternatively, should the Court determine an algorithm is required, the structure is: a mobile terminal (1:24, 2:15, 2:21, 2:42, 3:19, Fig. 1) configured to perform one or more of the algorithms set forth in the '872 Patent at 2:49-52, 3:39-41, and Fig. 1 (and equivalents).	Indefinite. This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: "setting up an emergency call connection" Structure: no corresponding structure disclosed

The patent "clearly links" the disclosed terminal to each recited function. *See* Opening Br. at 12-20. Unable to deny this, Defendants refuse to acknowledge that the terminal disclosed and described in the '872 Patent is "structure." But their mischaracterizations are contrary to law because they ignore the specification and the perspective of one skilled in the art.

The '872 Patent relates to how a terminal places an emergency call in a specific type of mobile network environment, namely an IP Multimedia Subsystem ("IMS"). Hence, the disclosed "terminal" is a mobile terminal configured for IMS communications. This is conveyed

in the title, in the Abstract, in Figure 1, in the background, in the summary, in the detailed description, and in the claims themselves. Moreover, the patent repeatedly references and discusses the terminal in the context of 3GPP Technical Standard 23.167 Release 7, titled "IP Multimedia Subsystem (IMS) emergency sessions (discussed in the '872 Patent at 1:16-26, 1:1:65-67), which describes known features, capabilities, and protocols of the terminal in the context of IMS emergency sessions. *See* Ex. H.

Based on this intrinsic evidence, one skilled in the art would understand the disclosed and claimed "terminal" to be a mobile terminal configured for an IP multimedia subsystem — not a "black box." *See* Ex. G at ¶¶ 45-47. A skilled artisan would know that such a terminal is configured to support the protocols related to IMS, all of which were well-known. *Id*. This special-purpose terminal expressly disclosed in the specification is the structure that actually performs the recited functions. It is not a mere "abstraction" used to describe a function — it is tangible structure that supports well-known protocols.

Defendants' insistence on identification of subcomponents "within" the terminal is arbitrary and unwarranted. The inventors were not required to provide source code-level detail describing how a terminal performs the claimed functions. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) ("The amount of detail that must be included in the specification depends on the subject matter that is described and its role in the invention as a whole, in view of the existing knowledge in the field of the invention."); *Intel Corp. v. VIA Techs.*, 319 F.3d 1357, 1367 (Fed. Cir. 2003) ("By analogy, if a chair is disclosed in the specification that corresponds to the 'means for seating' limitation in a claim, asserting that there are infinite numbers of structures that could make a chair or there are unlimited types of chairs in the world would not necessarily make the claim indefinite.").

Rather, the inquiry is whether one skilled in the art would understand the specification itself to disclose structure. "This is not a high bar." *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). All an applicant must do is "recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularly requirement[.]" *Id.* at 950 (citation omitted). Moreover, "interpretation of what is disclosed in the specification must be made in light of the knowledge of one skilled in the art." *Id.* So long as structure is disclosed, it is not necessary to disclose well-known details of the structure. *Id.* at 952.

Because the '872 specification clearly links the claimed function to the disclosed terminal, and that terminal constitutes discrete structure to a person skilled in the art, Defendants' indefiniteness arguments fail. Moreover, although no algorithm is required, the '872 Patent even satisfies that test by explaining how the terminal performs the recited functions. *See* Opening Br. at 15, 18, 20. The Court should reject Defendants' baseless allegations.

2.   "Receiver," "Comparator," and "Connection Unit" (cl. 13, 14, 18)

Disputed Term	CCE's Proposed Construction	Defendants' Proposed Construction
"receiver" (cl. 13, 18)	No construction necessary. Not subject to 35 U.S.C. § 112 (6).	Indefinite. This is a means-plus-function element to be construed in accordance with 35 U.S.C. §112, ¶ 6. Function: "receive a network identifier of a visited network notified to a terminal when the terminal is registered in the visited network" Structure: no corresponding structure disclosed
"comparator" (cl. 13, 14)	No construction necessary. Not subject to 35 U.S.C.	Indefinite. This is a means-plus-function element to be construed in

	§ 112 (6).	accordance with 35 U.S.C. §112, ¶ 6.
		Function: "compare the received network identifier of the visited network with a network identifier of a home network of the terminal"
		Structure: no corresponding structure disclosed
"connection unit" (cl. 13, 14)	No construction necessary. Not subject to 35 U.S.C. § 112 (6).	Indefinite.
		This is a means-plus-function element to be construed in accordance with 35 U.S.C. §112, ¶ 6.
		Function: "compare the received network identifier of the visited network with a network identifier of a home network of the terminal"
		Structure: no corresponding structure disclosed

Unlike claim 12, claims 13, 14, and 18 of the '872 Patent do not recite "means for" elements. Accordingly, they are entitled to a presumption that 35 U.S.C. 112(6) does not apply. It is Defendants' burden to show that these claims fail to recite sufficiently definite structure. They cannot, because each of the disputed phrases conveys structure to a skilled artisan.

First, a receiver is a well-known, discrete component of the IMS-capable mobile terminal described in the specification. Ex. G (Royer Decl.) at ¶¶ 50-53. One of ordinary skill in the art would understand that the '872 Patent uses the term "receiver" to refer to a structural component of an IMS-capable mobile terminal. *Id.* at ¶ 51. The claims themselves recite a terminal that supports IP multimedia subsystem (IMS) communications (which are defined in applicable 3GPP Technical Specifications). *Id.* at ¶¶ 46-47, 50; Ex. D at 4:64-5:11. And the specification makes clear that the terminal supports IMS communications and other 3GPP protocols required for cellular service. Ex. G at ¶¶ 46-47, 50; Ex. D at Abstract ("the terminal is already registered

in the IMS"); Figure ("Terminal registers in the mobile radio network…Terminal registers in the

IMS (SIP REGISTER)…Terminal transmits emergency call…"); 1:23-26 ("TS 23.167 is

currently based on the fact that a terminal which wishes to transmit an emergency call in the IMS

first registers in the IMS by means of an emergency call IP URI"); 2:1-39; 2:50-51 ("In the case

of emergency calls, the terminal can immediately set up the SIP session by means of an SIP

INVITE message"); 3:19-42 ("A terminal…registers in a mobile radio network and obtains a

network identifier ("MCC1/MNC1") of the mobile network visited by it…the terminal does not

perform a special (separate/further) registration for the emergency call desired by it but

immediately sets up the emergency call by means of a 'SIP INVITE' message.").

In this context, a receiver is a component that is connected to other components of a

terminal (such as a memory and baseband processor) to receive messages transmitted by the

mobile network to the terminal. Ex. G at ¶ 51; *see also* Ex. E at 641 (defining "receiver" as "a

component, device, piece of equipment, or system which accepts information bearing signals,

and which can extract the meaningful information contained"). A receiver is an essential

structural component of any mobile terminal that supports IMS emergency calls, and one skilled

in the art would understand the claimed "receiver" as structure. *Id.* at ¶¶ 51-53.

A "comparator" is also a well-known component of the IMS-capable mobile terminal

described in the specification. *Id.* at ¶ 57. One skilled in the art would understand that the term

"comparator" in the '872 Patent to refers to discrete logic (e.g., an "if" statement) that compares

values stored in memory to determine whether they match. *Id*. This is evidenced by the claim

language. *Id.* at ¶ 58; Ex. D at 5:1-10 ("a comparator configured to compare the received

network identifier of the visited network with a network identifier of a home network…the

comparator reveals a match between the network identifiers"). It is also confirmed by the

specification's description of this comparison of stored values. Ex. G at ¶ 58; Ex. D at 2:30-32

("the comparison between the stored identifier of the one network and the received identifier of

the visited network has revealed that both networks are identical"); 3:30-38 ("a comparison of

the network identifier "MCC1/MNC1" (stored in the terminal after its registration/authentication

etc. in the mobile radio network visited by it) … with the network identifier "MCC2/MNC2" of

the network in which the P-CSCF is located, reveals that the P-CSCF is located in the network

visited by the terminal").

Again, in this context a comparator is a basic structural component of an IMS-capable

mobile terminal such as described and claimed in the '872 Patent, and is essential to determine

whether values, such as network identifiers, match. Ex. G at ¶¶ 56-58; *see also* Ex. E at 129

(defining "comparator" as "a circuit, device, or instrument which compares quantities"). One

skilled in the art would understand the claimed "comparator" as structure. Ex. G at ¶ 59.

Finally, one of ordinary skill in the art would understand that the term "connection unit"

refers to a structural component of an IMS-capable mobile terminal, namely, a SIP client. *Id.* at

¶¶ 62-63. This is evidenced by the claim language, which explains that the "connection unit" is

the terminal component which sets up an emergency call connection when the terminal is already

registered in an IMS. *Id.* at ¶ 64 (citing Ex. D at 5:4-10). Moreover, this occurs when "the

comparator reveals a match between the network identifiers," confirming that the connection unit

interacts with other components of the terminal, including the comparator. *Id.*

The specification further explains that the terminal sets up an emergency call by sending

a Session Initiation Protocol ("SIP") INVITE message in accordance with the applicable 3GPP

technical standards. Ex. G at ¶ ; Ex. D at 1:22-31 ("[3GPP] TS 23.176 is currently based on the

fact that a terminal which wishes to transmit an emergency call in the IMS first registers in the

IMS by means of an emergency call SIP URI…This SIP URI (Session Initiation Protocol Uniform Resource Identifier) is either preconfigured in the terminal or the terminal generates it from an existing SIP URI which is stored, e.g., on the UICC…"); 2:51-52 ("In the case of emergency calls, the terminal can immediately set up the SIP session by means of an SIP INVITE message"); 3:39-42 ("the terminal…immediately sets up the emergency call by means of a 'SIP INVITE' message").

One skilled in the art would also have knowledge of SIP and IMS protocols and processes, including those detailed in 3GPP TS 23.176 (repeatedly cited in the '872 Patent), and would know that the "connection unit" which sets up the IMS emergency call is a SIP client. Ex. G at ¶¶ 62-63. The fact that the claimed "connection unit" corresponds to a SIP client is also confirmed by extrinsic evidence, including 3GPP Technical Report 22.944 v.6.0.0, which explains that the SIP client "terminates IMS signaling in the user equipment" and "is responsible for all the control signaling between the user equipment and elements of the IMS domain in the network." *Id.* at ¶ 65; Ex. I at 18. Thus, the "connection unit" is a well-known component of any mobile terminal that supports IMS connections, including emergency calls, and would be understood as structure by a skilled artisan. Ex. G at ¶¶ 62-66.

Accordingly, the components recited in claims 13, 14, and 18 of the '872 Patent are not mere "nonce words," but recite definite structure known to those skilled in the art. The fact that the claimed components take their names from functions they perform is immaterial — such is the case with innumerable structures, such as "filter," "brake," "clamp," "screwdriver," and "lock." *See, e.g.*, *E2E Processing, Inc. v. Cabela's Inc.*, 2015 U.S. Dist. LEXIS 86060 at *17-24 (E.D. Tex. Jul. 2, 2015) (holding "selector component," "adapter component" and "integration component" are particular software structures).

Because claimed structures here have an understood meaning to those skilled in the art, they are not subject to 35 U.S.C. § 112(6). *See Smartflash LLC v. Apple Inc.*, 2015 U.S. Dist LEXIS 91669 at *13-14 (E.D. Tex. Jul. 7, 2015) (applying "long-standing principles articulated prior to the abrogated *Lightning World* decision" in holding that "processor" and "code" are not means-plus-function elements). Moreover, even if these elements did invoke § 112(6), the claimed functions and structures are analogous to those set forth for claim 12, discussed above and in CCE's Opening Brief. Defendants cannot carry their burden.

D.   U.S. Patent No. 7,218,923

The '8923 patent relates to mobile device security. Many mobile devices available today utilize "open" platforms that allow developers unaffiliated with the manufacturer to create applications for users to install and execute. Ex. J at 1:31-37. Open development offers many benefits, but security is a perennial concern in light of the possibility that unscrupulous developers might attempt to fraudulently exploit devices and services. *Id.* at 1:38-47.

The '8923 patent thus describes security features that can be used to control messages sent by applications. More specifically, it describes a terminal capable of diverting a message, before it is transmitted to a network, to a controlling entity and, based on the message, controlling whether the application behaves in a predetermined manner. *See id*. at 1:59-2:11.

1.   "controlling entity" (cl. 1, 4, 24, 26)

CCE's Proposed Construction	Defendants' Proposed Construction
No construction necessary. Not subject to § 35 U.S.C. 112(6).	Indefinite.
Alternatively, should the Court determine this term is subject to 35 U.S.C. § 112(6):	This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.
Function: controlling…whether the application program behaves in a predetermined manner in the communication terminal.	Function: "controlling…whether the application program behaves in a predetermined manner"
	Structure: no corresponding structure

Structure: trusted entity/agent 212 (and equivalents). See, e.g., 1:59-2:67, 3:57-66, 4:46-54, 4:20-42, 6:27-48, 6:49-67, 7:13-8:19, 4:63-5:5 and in Figs. 2-3 and 5-10. Alternatively, should the Court determine an algorithm is required, the structure is: trusted entity/agent 212 configured to perform one or more of the algorithms described in the '8923 patent at Abstract, 1:63-2:11, 4:61-5:2, 6:27-48, Figs. 2-3 and 5-6 (and equivalents).	disclosed

The asserted claims of the '8923 Patent recite a "controlling entity" that resides in a communications terminal. This patent has been twice construed by this Court. Until now, no defendant has alleged this term fails to recite definite structure. Defendants again fail to carry their burden on invalidity because one skilled in the art would understand that the claimed "controlling entity" has definite meaning as the name for particular control software residing in the claimed terminal. Ex. G at ¶¶ 70-75, 79.

Both the claims and specification make this clear. First, claims 1 and 24 each recite a "terminal" that comprises an application program configured to send messages toward a communications network and a "diverting unit" configured to divert a message sent from the application program to a "controlling entity." An "application program" is software, and a skilled artisan would also know that a "message" sent from an application to another entity within the terminal is an electronic data structure generated and interpreted by software. *Id.* at ¶ 72. The claimed "controlling entity" is thus specific control software that takes action based on a data structure (a message) and controls whether other software (the application program) behaves in a predetermined manner. *Id.* As such, one skilled in the art would recognize the "controlling entity" as physical structure (of executable program code), in the same way an application program is structure. *Id.*

17

The specification further confirms the phrase "controlling entity" imparts sufficient structural meaning to a skilled artisan. *Id.* at ¶¶ 73-75. It explains that the "controlling entity" may be a "dedicated software agent" or a modified "DRM agent." Ex. J at 3:57-66. And, it also describes how the "controlling entity," referred to as a "trusted agent," interacts with other software components in the terminal to control application behavior in various embodiments:

> At least some of the outbound messages generated by an application in a terminal are diverted to the controlling entity on their way from the application to the network. The controlling entity evaluates whether any changes are needed in the message or in the behavior of the application. Based on the evaluation, the control entity then returns the message intact or in a modified form. The controlling entity may even prohibit the sending of the message, if it detects that the application has no pertinent rights or that the application is not behaving, as it should.

Ex. J at 1:60-2:3. Further,

> When the protocol stack receives the positive response, it sends the INVITE request to the trusted agent (step 7). The trusted agent then examines the request and checks, whether the application behaves as it should be behaving (step 8). The trusted agent may modify the request, for example by adding control data, such as control parameters, to the request. As discussed below, the trusted agent may also prohibit the sending of the request.

Id. at 4:46-65. And:

> As mentioned above, in one embodiment of the invention the applications are controlled to ensure that they obey the policies set by the operator … in this embodiment the trusted agent compares the behavior of the application to the policy rules at step 8. Moreover, in this embodiment the type(s) of the messages may be different. Depending on the result of the comparison, the trusted agent may then allow or prohibit the sending of the message, for example.

Id. at 6:27-41.

Together these passages (with the claim language) inform the structural character of the "controlling entity." Ex. G at ¶ 75. A skilled artisan would understand that it is a control software component that interacts with other software components and data structures, and would thus be understood as structure. *Id*.

18

As such, the claimed "controlling entity" claimed in the '8923 Patent is distinguishable from the "nonce" words held to invoke § 112, ¶ 6 in other cases. *See, e.g.*, *E2E Processing*, 2015 U.S. Dist. LEXIS 86060 at *22-23 ("On balance, this disclosure supports Plaintiff's position that a person of ordinary skill in the art would understand 'adapter component' and 'integration component' as particular software structures. Further, the specification thus provides context as to the "inputs and outputs" and how the [components] 'interact with other components … in a way that … inform[s] the structural character of the limitation[s]-in-question or otherwise impart[s] structure") (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015)). Because claimed structure has an understood meaning to those skilled in the art, it is not subject to 35 U.S.C. § 112(6).

Nonetheless, even if the claimed "controlling entity" was subject to § 112(6), it is not indefinite because the specification discloses that the structure clearly linked to "controlling…whether the application program behaves in a predetermined manner" is trusted entity/agent 212. Ex. G at ¶ 77. The specification passages discussed above make clear that the "trusted agent" "acts as a controlling entity controlling the rights and behavior of the applications," and "may be a dedicated software agent or a Digital Rights Management (DRM) agent whose normal functionality has been modified for the method of the invention." Ex. J at 3:57-66; *see also id*. at 4:46-65; 6:27-41. Because the "trusted entity/agent" described in the specification is specific software structure rather than a general purpose processor, no algorithm is necessary. *See Mobile Telcoms. Techs., LLC v. LG Elecs. Mobilecomm USA, Inc.*, No. 2:13-cv-947, 2015 U.S. Dist. LEXIS 62392 at *51-52 (E.D. Tex. May 12, 2015) ("Because the specification links the claimed function to such structures rather than to a general-purpose computer, no algorithm is required"); *see also Typhoon Touch*, 659 F.3d at 1384-85.

Nonetheless, the '8923 Patent disclosure would satisfy an algorithm requirement as well. It explains that the "controlling entity" may control the application behavior by for example, "examin[ing] the request [i.e., a message] and check[ing], whether the application behaves as it should be behaving" (Ex. J at 4:46-65), "compar[ing] the behavior of the application to the policy rules," (*id.* at 6:36-37), and/or "allow[ing] or prohibit[ing] the sending of the message" (*id.* at 6:39-41). Ex. G at ¶ 77. The specification also explains that the controlling entity may control the application by "evaluating whether any changes are needed in the message or the behavior of the application" and, based on that evaluation, "returning the message intact or in a modified form" or "prohibit[ing] the sending of the message, if it detects the application has no pertinent rights or … is not behaving[.]" *Id.*; Ex. J at 1:63-2:11. Accordingly, if an algorithm were required, the patent explains how the trusted entity/agent 212 performs the controlling function in these passages and elsewhere, satisfying that requirement. Ex. G at ¶ 77; *see also CCE v. HTC Corp.*, No. 6:13-cv-507, Dkt 363 at 31 (E.D. Tex. Mar. 9, 2015) (citing *Ishida Co., Ltd. v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000) for the proposition that a patent can "disclose[] alternative structures for accomplishing the claimed function.").

Defendants' conclusory indefiniteness allegations should be rejected.

Dated: **November 13, 2015**.   By:

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CERTIFICATE OF SERVICE

I hereby certify that on the 13th day of November, 2015, I electronically filed the foregoing document with the clerk of the Court for the U.S. District Court, Eastern District of Texas, Tyler Division, using the Court's electronic case filing system. The electronic case filing system sent a "Notice of Electronic Filing" to the attorneys of record who have consented in writing to accept this Notice as service of this document by electronic means.

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